

MANUFACTURE OF SEMICONDUCTOR DEVICE

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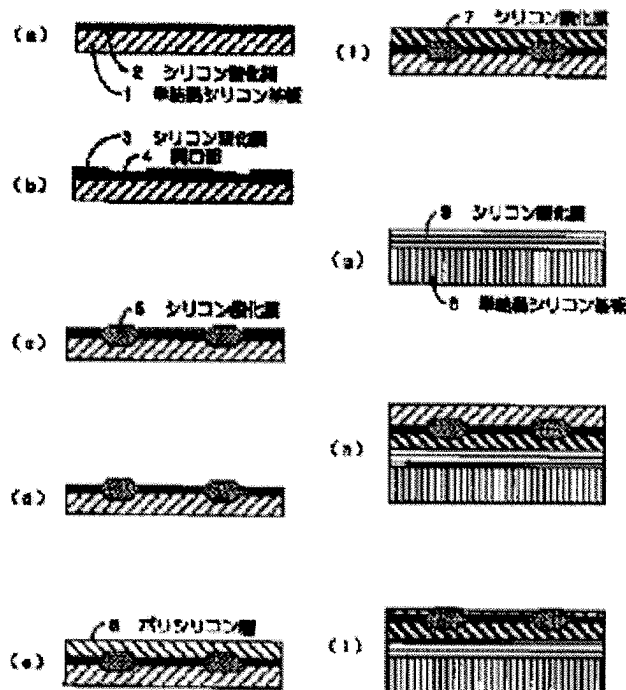
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Abstract of JP10012721

PROBLEM TO BE SOLVED: To provide manufacture of a semiconductor device which enables formation of an SOI substrate having an insulating film with an arbitrary thickness and a thin activated silicon layer, isolation between elements, and planarization of the surface. **SOLUTION:** LOCOS oxidation is carried out on a single crystal silicon substrate 1, thereby forming a silicon oxide film 5 for element isolation. A polysilicon layer 6 is deposited on the side of the single crystal silicon substrate 1 where LOCOS oxidation has been carried out. Subsequently, the polysilicon layer 6 is transformed into a silicon oxide film 7 by thermal oxidation. Then, a single crystal silicon substrate 8 having a silicon oxide film 9 on one main surface thereof is separately prepared, and is bonded with the single crystal silicon substrate 1 in such a manner that the silicon oxide films 7, 9 face each other. The single crystal silicon substrate 1 is ground and abraded until at least a part of the silicon oxide film 5 is exposed.



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